DCASR
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STRATEGIC/
TOTAL QUALITY MANAGEMENT
MASTER PLAN

USING
MANAGEMENT BY PLANNING
(MBP)

JUNE 1989

89 10 6 005

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13. ABSTRACT *(Maximum 200 words)*

This document discusses the DCASR Boston approach and plan to implement Total Quality Management (TQM). It includes the DCASR Boston vision, management by planning, one-year plan, milestones and training plan. Vision elements and management by planning are discussed in detail.

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TQM (Total Quality Management), Continuous Process Improvement, Contract Administration Services, Management by Planning

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FOREWORD

DCASR Boston's management is committed to providing all managers, supervisors and personnel with the tools, training and incentives to improve the quality, timeliness and efficiency of the services we provide our customers.

The Strategic/Total Quality Management (TQM) Master Plan developed through Management by Planning (MBP) is a living, breathing document to ensure that the directions, targets and objectives of our organization are well developed and defined, clearly communicated, monitored, implemented and responsive (based on system feedback).

To attain our vision, we must have commitment, vision (strategic), principles, communication, organization, targets (tactical), execution, assessment and standardization.

In realizing our vision, I challenge you, "DCASR Boston's Team," to work towards improving the systems, functions and processes dedicated to supporting our customers.
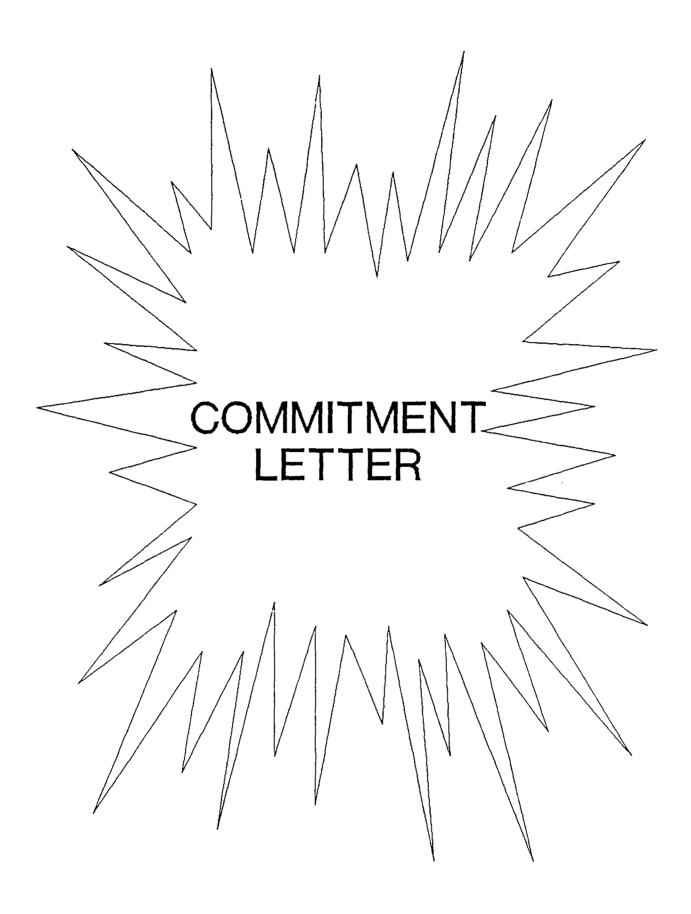
JAMES F. CASHMAN
Colonel, USAF
Commander

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STRATEGIC/TOTAL QUALITY MANAGEMENT MASTER PLAN

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COMMITMENT LETTER

DCASR BOS-D

SUBJECT: Total Quality Management - Our Future

TO: All Employees

I am committed to creating an environment involving management and employees, now and in the Region's future, where essential elements of mission attainment and success are measured in terms of customer satisfaction.

Every DCASR employee must share a common desire to eliminate the regulatory and bureaucratic obstacles inhibiting the continuous improvement of the services we provide our customers. In the Total Quality Management environment, we are all customers. Traditionally, focus has been on the external customer--buying commands and industry. TQM expands this concept to include us--the individuals within the system. The internal customer of this new focus is the next person in the process--the user of the product each of us produces.

I challenge you to work towards improving the systems, functions and processes dedicated to supporting our customers. We need to change the way we think and perform our jobs: to continuously improve our processes; to broaden our view of what we do; and to understand the impact of our actions on each other and on the functional areas of our organization. I am committed to providing us with the necessary tools to make these changes.

We are in the beginning stages of planning to meet these challenges by using the TQM philosophy and Management by Planning techniques. These approaches are neither fads nor pet projects. Rather, they are a way of improving everything we do to support our customers and enhance our environment.

Attaining our shared vision will allow us to:

   o know our customers,
   o provide the proper service to our customers, and
   o measure continuous improvement of our service.

   This is our vision and our challenge for the future of
DCASR Boston.

                              JAMES F. CASHMAN
                              Colonel, USAF
                              Commander

MISSION STATEMENT

MISSION STATEMENT
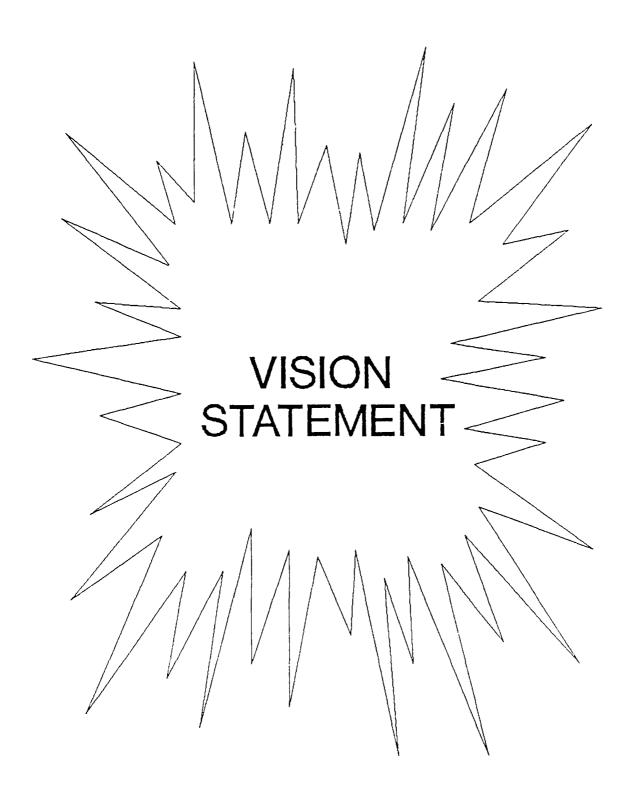
OUR MISSION IS TO ADMINISTER
DELEGATED CONTRACTS AND
PROVIDE QUALITY PRODUCTS
AND SERVICES TIMELY AND
ECONOMICALLY; TO BE RESPONSIVE
TO OUR CUSTOMERS' NEEDS BY BEING

PROACTIVE AND SEEKING

CONTINUOUSLY TO IMPROVE THE

ACQUISITION PROCESS.

DEFINITION OF TOTAL QUALITY MANAGEMENT (TQM)

TOTAL QUALITY MANAGEMENT (TQM)
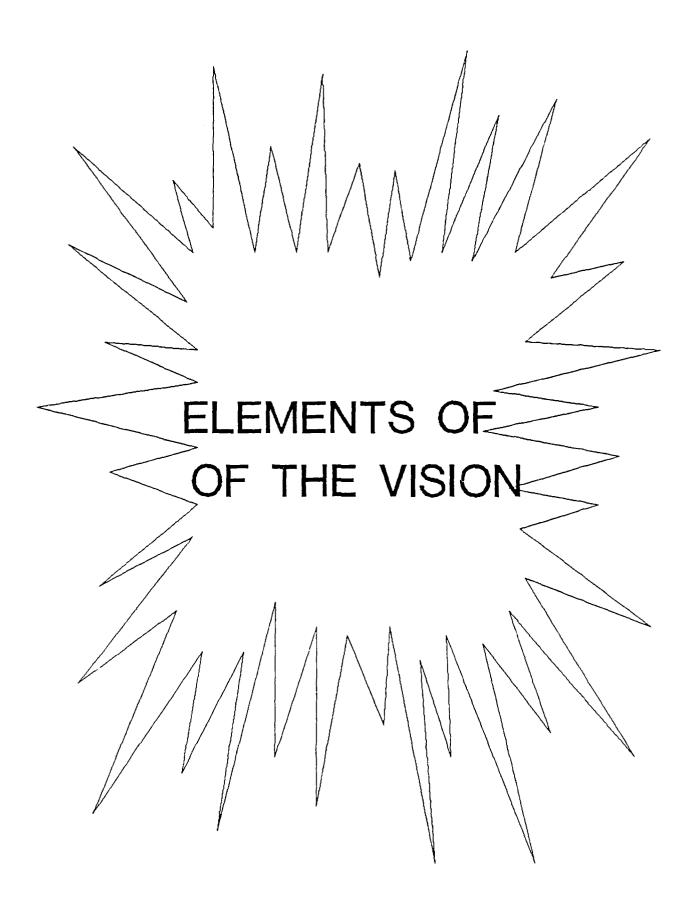
TQM IS BOTH A PHILOSOPHY AND A SET OF GUIDING PRINCIPLES ANCHORING A CONTINUOUSLY IMPROVING ORGANIZATION.

TQM IS APPLYING QUANTITATIVE METHODS AND HUMAN RESOURCES TO IMPROVE THE MATERIAL AND SERVICES SUPPLIED TO AN ORGANIZATION, ALL THE PROCESSES WITHIN AN ORGANIZATION AND HOW CURRENT AND FUTURE NEEDS OF OUR CUSTOMERS ARE MET.

VISION
STATEMENT

DCASR BOSTON
FIVE-YEAR VISION

CREATE AN ENVIRONMENT
THAT PROMOTES CUSTOMER
SATISFACTION THROUGH
TEAMWORK AND CONTINUOUS
PROCESS IMPROVEMENT.

ELEMENTS OF
OF THE VISION

MANAGEMENT COMMITMENT

NARRATIVE

MANAGEMENT COMMITMENT IS A LONG-TERM DEDICATION AND RESPONSIVENESS TO CHANGE CONCURRENTLY WITH DEVELOPING CLEAR POLICIES FOR CONTINUOUS IMPROVEMENT. MANAGEMENT COMMITMENT MUST PROVIDE GROWTH OPPORTUNITIES FOR BOTH INDIVIDUALS AND THE ORGANIZATION THROUGH EDUCATION AND TRAINING. IT ALSO INCLUDES INVESTING TIME AND RESOURCES TO PAVE THE WAY FOR ACHIEVEMENT.

IMPEDIMENTS

- NOT INVENTED HERE
- JUST ANOTHER FAD
- CRISIS MANAGEMENT
- LACK OF PLANNING
- LACK OF EDUCATION AND TRAINING
- ORGANIZATIONAL CULTURE
- LACK OF UNDERSTANDING OF MANAGEMENT PRINCIPLES
- PETER PRINCIPLE
- STIFLING EMPLOYEE CONTRIBUTIONS
- BUREAUCRACY
- CONFORMITY
- OBTAINING COMMITMENT FROM ALL MANAGEMENT LEVELS
- WE'VE ALWAYS DONE IT THIS WAY
- RESISTANCE TO CHANGE
- BLIND OBEDIENCE

COUNTERMEASURES

- PRACTICE, PRACTICE, PRACTICE
- COMMON LANGUAGE; COMMON UNDERSTANDING
- EDUCATION AND TRAINING
- FEEDBACK MECHANISMS
- PUBLICITY
- MBP AND TQM
- RECOGNITION

EMPLOYEE INVOLVEMENT

NARRATIVE

THE ANALYSIS OF EMPLOYEE INVOLVEMENT CONFIRMED THE DEMING ASSERTION: "MANAGEMENT IS RESPONSIBLE FOR 94 PERCENT OF THE PROBLEMS AND EMPLOYEES ARE RESPONSIBLE FOR ONLY 6 PERCENT."

EMPLOYEES MUST BE INVOLVED IN THE DECISION-MAKING PROCESS, MOTIVATED TO CONTRIBUTE THEIR IDEAS AND THOUGHTS ON WHAT IS VALUABLE AND ON WAYS TO EFFECT IMPROVEMENTS. THESE ARE THE PEOPLE DOING THE JOB. MANAGEMENT IS ULTIMATELY RESPONSIBLE FOR MAKING THE DECISIONS, BUT BY INVOLVING EMPLOYEES, MANAGERS CAN MAKE MORE INFORMED DECISIONS.

IMPEDIMENTS

SEE NEXT PAGE

COUNTERMEASURES

- EDUCATE MANAGERS
- DEFINE EMPLOYEE INVOLVEMENT
- PUBLICIZE
- IMPROVE THE RESPONSIVENESS ON PROGRAM AREAS SUCH AS BENEFICIAL SUGGESTIONS, MIPS
- BEGIN USING TASK TEAMS
- REESTABLISH "REAL" QUALITY CIRCLES
- DEMONSTRATE THROUGH PRACTICE
- ACKNOWLEDGE RESPONSIBILITY - HOW?
- RECOGNIZE EMPLOYEES AS CUSTOMERS
- CHANGE THE CULTURE
- IMPROVE EMPLOYEE ORIENTATION (ALL SUPERVISORY LEVELS)
- USE DCAS (VIP) BRIEFING FOR ALL EMPLOYEES
- IDENTIFY AN INCENTIVE FOR MANAGERS TO CHANGE
- IDENTIFY AN INCENTIVE FOR EMPLOYEES TO CHANGE

MANAGEMENT CONTINUUM

MANAGEMENT	BRIDGE --> BOTH	BOTH	BRIDGE --> EMPLOYEES	EMPLOYEE
WORKFORCE DEVELOPMENT	AWARDS	LISTENING	MIPS	INVOLVEMENT IN SYS DEVL
HORIZONTAL/VERTICAL STRUCTURES	EDUCATION	PARTICIPATIVE MANAGEMENT	BENEFICIAL SUGGESTIONS	EMPLOYEE GOALS
CROSS-FUNCTIONAL INTEGRATION	CREATIVE MANAGEMENT	FREEDOM OF THOUGHT	KNOWING HOW TO DO JOB	DEGREE OF EMPLOYEE SAY
KNOWLEDGE OF THE ORGANIZATION	DRIVE OUT FEAR	QUALITY CIRCLES		IN DECISION MAKING
HOW TO GET EMPLOYEE INVOLVEMENT	FORMAL/INFORMAL ORG	CROSS-FUNCTIONAL TRAINING		ORGANIZATIONAL STATUS
PEOPLE ARE OUR MOST IMPORTANT ASSET	PRIORITIES	KNOWLEDGE OF WHAT'S AVAILABLE		PRIDE IN WHERE YOUR AT
RECOGNIZING EMP CONTRIB - ALL LEVELS	COMMON LANGUAGE	KNOWING WHAT THE JOB IS		TRAINING
REWARDS	COMMON UNDERSTANDING	RESISTANCE TO CHANGE		
DATA ANALYSIS ... HOW TO USE TOOLS		ATTITUDE ADJUSTMENT		
WORK DRIVERS		NETWORKING		
USE OF INTERNAL VS EXTERNAL TRAINERS		UNDERGROUND NETWORK		
TRAIN THE TRAINERS		IDENT & BREAKING DOWN BARRIERS		
ALTERNATE WORK SCHEDULES		PEER PRESSURE		
ENHANCE CREATIVITY		STRESS		
JOB SATISFACTION		INTERPERSONAL RELATIONSHIPS		
FACILITIES (SPACE)		WHEAT FROM CHAFF		
RESOURCE UTILIZATION COMMITTEE		SOCIAL FUNCTIONS		
RESPONSIVENESS OF PERSONNEL SYSTEM		ENTERTAINMENT		
RESPONSIVENESS OF MANAGEMENT				
RIGHT PERSON RIGHT JOB				
SECRETARIAL POOLS/SUPPORT				
PD ADEQUACY				
JOB CLASSIFICATION SERIES				
JOB BANDING				
EMPLOYEE MORALE				
RESOURCE PLANNING				
PLANNING				
INTERNAL VS EXTERNAL RECRUITMENT				
TIMELY JOB SELECTIONS				
REGULATIONS AND PROCEDURES				
CENTRALIZATION VS DECENTRALIZATION				
EMPLOYEE INVESTMENT INCENTIVES				
TRAINING				
BENEFITS				
AUTOMATION				
EQUITABLE SELECTION PROCESS				
RECOGNIZING INTERNAL TALENT				
PROMOTION OPPORTUNITIES				
UPWARD MOBILITY				
LONG TERM GOALS VS SHORT TERM GOALS				
OVERCOMING FEAR OF REPRISAL				
UNION'S RIGHT AWAY				

FEEDBACK

NARRATIVE

FEEDBACK IS A TWO-WAY PROCESS. IT ENHANCES COMMUNICATIONS CROSS FUNCTIONALLY, PROMOTES A COMMON LANGUAGE AND SERVES A CONSTANCY OF PURPOSE.   FEEDBACK MUST FLOW BOTH WAYS--FROM EMPLOYEES TO MANAGEMENT   AND   FROM   MANAGEMENT   TO   EMPLOYEES--AND   INCLUDE ACROSS-THE-BOARD PARTICIPATION.

IMPEDIMENTS

- LACK OF COMMON LANGUAGE
- TELLING PEOPLE WHAT THEY WANT TO HEAR RATHER THAN HOW IT IS (FEAR)
- REQUIRES COMMUNICATION
- KNOWLEDGE OF TOOLS
- WITH WHOM DO I TALK?
- IT'S TOUGH TO DO
- KNOWLEDGE OF CUSTOMERS
- TIMELINESS OF RESPONSE

COUNTERMEASURES

- EDUCATION
- TRAINING
- PUBLICITY
- CROSS-FUNCTIONAL ORIENTATION
- RECOGNITION
- PRACTICE (TO ELIMINATE FEAR)
- TENACITY

CUSTOMER FOCUS

NARRATIVE

CUSTOMER FOCUS IS KNOWING YOUR CUSTOMERS, IDENTIFYING THEIR NEEDS AND MEASURING THE SATISFACTION OF THE SERVICES DCASR BOSTON PROVIDES.

THERE ARE EXTERNAL CUSTOMERS (i.e., BUYING COMMANDS) AND INTERNAL CUSTOMERS (i.e., THE EMPLOYEE WITHIN THE SYSTEM--THE NEXT PERSON IN THE PROCESS). IDENTIFYING AND ACKNOWLEDGING CUSTOMERS PROVIDES THE OPPORTUNITY TO PROMOTE CUSTOMER SATISFACTION THROUGH TEAMWORK AND CONTINUOUS PROCESS IMPROVEMENT.

IMPEDIMENTS

- DO THEY KNOW THEY ARE OUR CUSTOMERS?
- POOR MARKETING
- APATHY
- VERTICAL THINKING
- CONFLICTING PRIORITIES
- POOR DEFINITION OF THE WORD "CUSTOMER"
- LACK OF RESPONSIVENESS
- POOR PERFORMANCE
- CULTURE

COUNTERMEASURES

- EQUITABLE RECOGNITION
- EDUCATION
- TRAINING
- FEEDBACK (CUSTOMER COMPLAINTS/SUGGESTIONS (INTERNAL/EXTERNAL
- PUBLICITY (INTERNAL/EXTERNAL)
- CROSS-FUNCTIONAL THINKING
- CLEAR DIRECTION ON PRIORITIES
- IDENTIFY CUSTOMERS
- PERFORMANCE MEASUREMENTS JOINTLY DEFINED

PROCESS THINKING ORIENTATION

NARRATIVE

PROCESS-THINKING ORIENTATION IS A METHODOLOGY OF IDENTIFYING THE PROCESS FROM BEGINNING TO END AND DOCUMENTING THAT PROCESS THROUGH STATISTICAL TOOLS. IT ALSO REQUIRES INVOLVING ALL LEVELS WITHIN THE ORGANIZATION AND IDENTIFYING HOW A CHANGE IN ONE PART OF THE SYSTEM AFFECTS OTHER PARTS OF THE ORGANIZATION AND THE PROCESS AS A WHOLE.

IMPEDIMENTS

- HARD TO DEFINE - NO RIGHT OR WRONG; LOT OF GRAY AREAS
- EXISTING PRACTICES
- GOAL ORIENTATION
- HQs DRIVEN GOALS
- USE OF STATISTICAL METHODS (FEAR OF USE)
- LACK OF PLANNING
- INACCURATE INFO. - LOTS OF WHAT'S BUT NO WHY'S
- WE MAKE ASSUMPTIONS (DECISIONS) WITHOUT SUPPORTING DATA
- VERTICAL ORIENTATION - EVERYTHING IS TOP DOWN
- ANOTHER FAD
- LACK OF EDUCATION AND TRAINING
- PEOPLE WANT TO BE LED RATHER THAN LEAD

COUNTERMEASURES

- EDUCATION   (HORIZONTAL THINKING
                  <USE OF VALID MEASUREMENT TOOLS
- TRAINING   (DEFINITION
- MANAGEMENT COMMITMENT   (SHOW ME
                          <ALLOCATION OF TIME
                          (CREDIBILITY
- FEEDBACK   (CONTINUOUS COMMUNICATION
                  <ON SUCCESSES
                  (PROGRESS; CHECKUPS
- PATIENCE
- USE   (SEEING IS BELIEVING
                  (BELIEVE IT CAN HAPPEN
- PERSEVERANCE
- GETTING EMPLOYEES INVOLVED OVER TIME

MEASURES OF VISION ATTAINMENT

NARRATIVE

MEASURES OF VISION ATTAINMENT ARE THE COMMON STATISTICAL METHODS WHICH PROVIDE BASE LINE INFORMATION FOR CONTINUOUS PROCESS IMPROVEMENT. MEASURES MUST BE "TIME SENSITIVE," TIED TOGETHER AND ATTAINABLE.

IMPEDIMENTS

- LACK OF UNDERSTANDING
- KNOWING WHAT TO MEASURE
- KNOWING HOW TO MEASURE
- FEAR OF USING QUALITY CONTROL AND MANAGEMENT TOOLS
- KNOWING THE CUSTOMERS
- CAN'T MEASURE WHAT WE WANT TO; MUST CONTINUE TO MEASURE SOMEONE ELSE'S GOALS
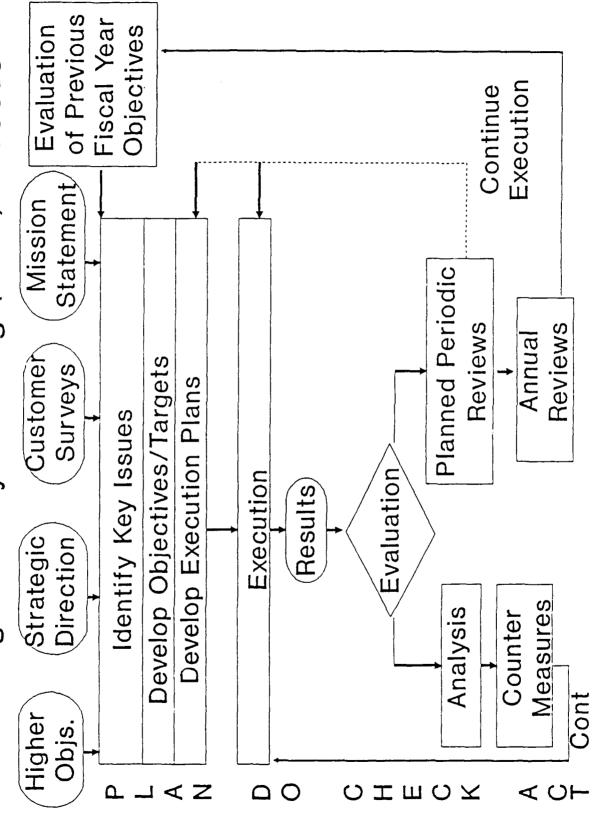
COUNTERMEASURES

- EDUCATION AND TRAINING
- USE OF THE TOOLS; EXPOSURE AND PRACTICE
- FEEDBACK
- ABOLISH ARBITRARY GOALS
- CULTIVATE CUSTOMER RELATIONSHIPS
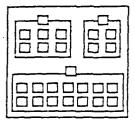
MANAGEMENT BY PLANNING

SUPPORTING DOCUMENT

DETAILED PLANNING STRUCTURE
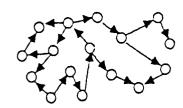
Management by Planning (MBP) Process

The Seven Tools for Management and Planning

General Planning
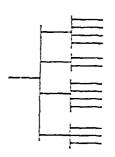
The **Affinity Chart (KJ)** makes sense out of disperate language information by placing it on cards and grouping the cards.

The **Interrelationship Digraph** identifies causal relationships between language data and thereby identifies critical items and originating items.

Intermediate Planning
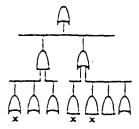
The **Tree Diagram** systematically breaks items down into details.
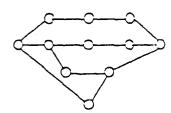
The **Matrix Chart** compares one set of items against another set and identifies the strength of their relationship.

The **Matrix Data Analysis** plots items on an x- and y-axis thus showing relationships of individual items and groups of items.

Detailed Planning

The **PDPC (Process Decision Program Chart)** identifies the various things that can go wrong in a plan and identifies countermeasures or contingencies.

The **Arrow Diagram** identifies which things can be cone simulataneously. The critical path is the longest time line from beginning to end of progect.

MANAGEMENT BY PLANNING (MBP)

THE MBP SYSTEM BREAKS PLANNING INTO SIX STEPS:

FIVE-YEAR VISION
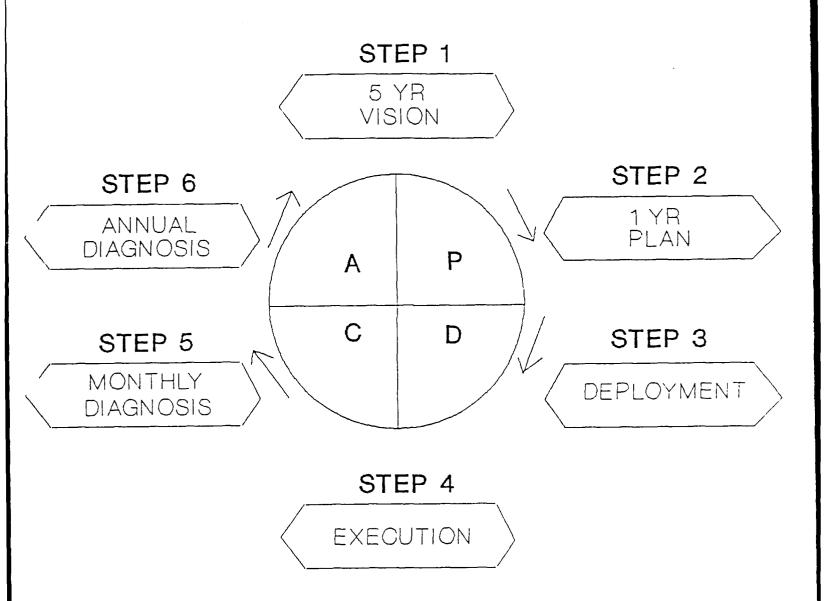
ONE-YEAR PLAN

DEPLOYMENT TO DEPARTMENTS

EXECUTION

MONTHLY DIAGNOSIS

ANNUAL DIAGNOSIS

STEP 1
5 YR VISION

STEP 2
1 YR PLAN

STEP 3
DEPLOYMENT

STEP 4
EXECUTION

STEP 5
MONTHLY DIAGNOSIS

STEP 6
ANNUAL DIAGNOSIS

A   P
C   D

THE SIX MBP STEPS

STEP 1 -- FIVE-YEAR VISION

THE FIVE-YEAR VISION IS COMPRISED OF ELEMENTS WHICH WE WANT TO CHARACTERIZE OUR ORGANIZATION. THIS MUST BE DONE BY SENIOR MANAGEMENT, BUT WHILE STILL IN DRAFT, IT SHOULD BE CIRCULATED TO ALL MANAGERS FOR COMMENTS ON WHAT ACTION PLANS IT MIGHT GENERATE.

THIS STEP ENABLES TOP MANAGEMENT TO DEVELOP A VISION WHICH THEY KNOW TO BE CLEAR AND UNDERSTOOD BY ALL AND WHICH WILL PRODUCE DESIRED ACTION--BASED ON THE BUY-IN OF PARTICIPATION.

STEP 2 -- ONE-YEAR PLAN

THE ONE-YEAR PLAN IS DEVELOPED USING STATISTICAL PROBLEM SOLVING TECHNIQUES. THE ONE-YEAR PLAN FOCUSES ON THE FIVE-YEAR VISION, WHAT'S GOING ON IN THE WORLD AND IN THE ORGANIZATION, AND ON LAST YEAR'S SUCCESSES AND FAILURES.

ADVANTAGES OF USING MANAGEMENT BY PLANNING TOOLS FOR THE ONE-YEAR PLAN INCLUDE: A HIGH LEVEL OF DETAIL WHICH HELP DETERMINE CAPABILITY POTENTIAL FOR CONTINUITY, e.g., SOLVING LAST YEAR'S PROBLEMS, THOROUGHNESS AND A SYSTEMATIC APPROACH.

STEP 3 -- DEPLOYMENT

DEPLOYMENT FOCUSES ON THE IDENTIFICATION OF KEY IMPLEMENTATION ITEMS AND A CONSIDERATION OF HOW THEY CAN SYSTEMATICALLY ACCOMPLISH THE PLAN.

STEP 4 -- EXECUTION
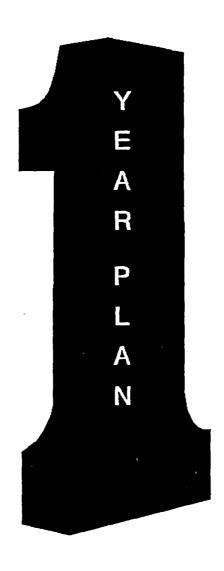
EXECUTION FOCUSES ON THE POWER OF CONTINGENCY PLANNING. THE STEPS TO ACCOMPLISH THE TASK ARE IDENTIFIED AND ARRANGED IN ORDER. THE IMPEDIMENTS AND COUNTERMEASURES AT EACH STEP ARE LISTED FOR EACH POTENTIAL PROBLEM. THIS THOROUGH APPROACH REDUCES THE LIKELIHOOD OF THINGS FALLING THROUGH THE CRACKS.

STEP 5 -- MONTHLY DIAGNOSIS

THE MONTHLY DIAGNOSIS FOCUSES ATTENTION ON THE PROCESS AND THE ROOT CAUSE RATHER THAN THE SYMPTOMS. THE MONTHLY DIAGNOSIS IS TO ASSURE DIRECTION AND CONSTANCY OF PURPOSE.

STEP 6 -- ANNUAL DIAGNOSIS

THE ANNUAL DIAGNOSIS FOCUSES ON THE PROCESSES THAT UNDERLINE THE RESULTS. IT ALLOWS MANAGEMENT TO MAKE SURE THAT EACH SECTOR OF THE ORGANIZATION IS CAPABLE OF MEETING ITS TARGETS.

YEAR PLAN
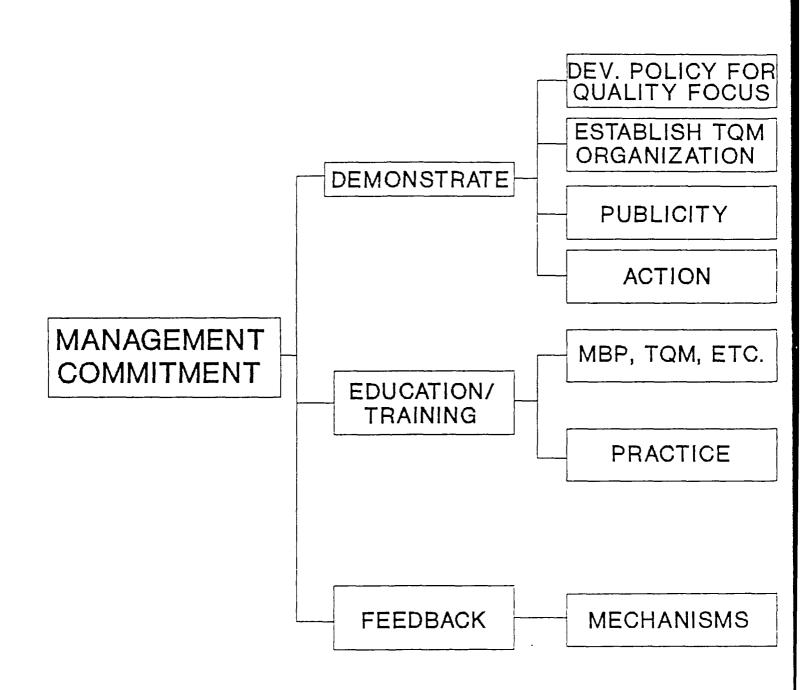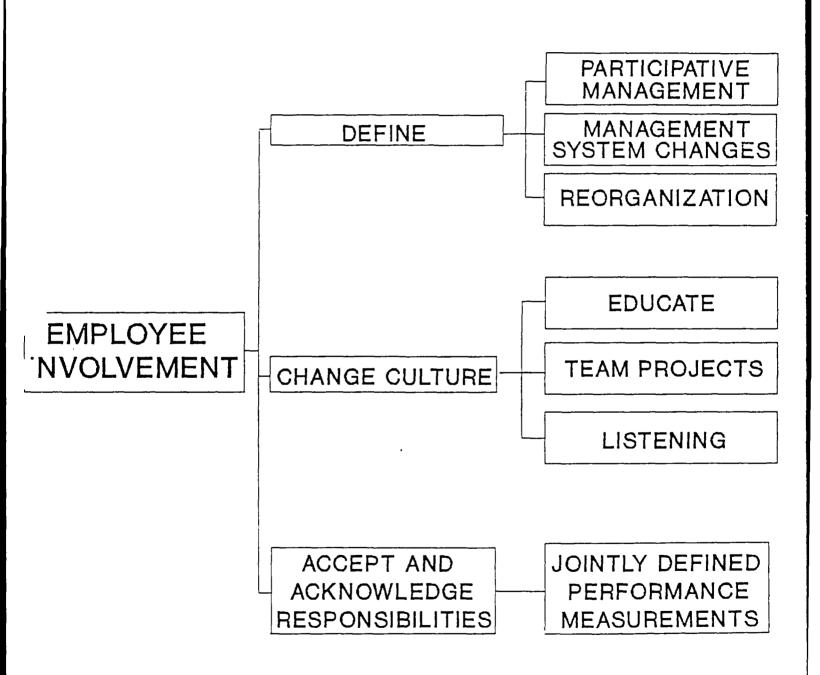
ONE-YEAR PLAN
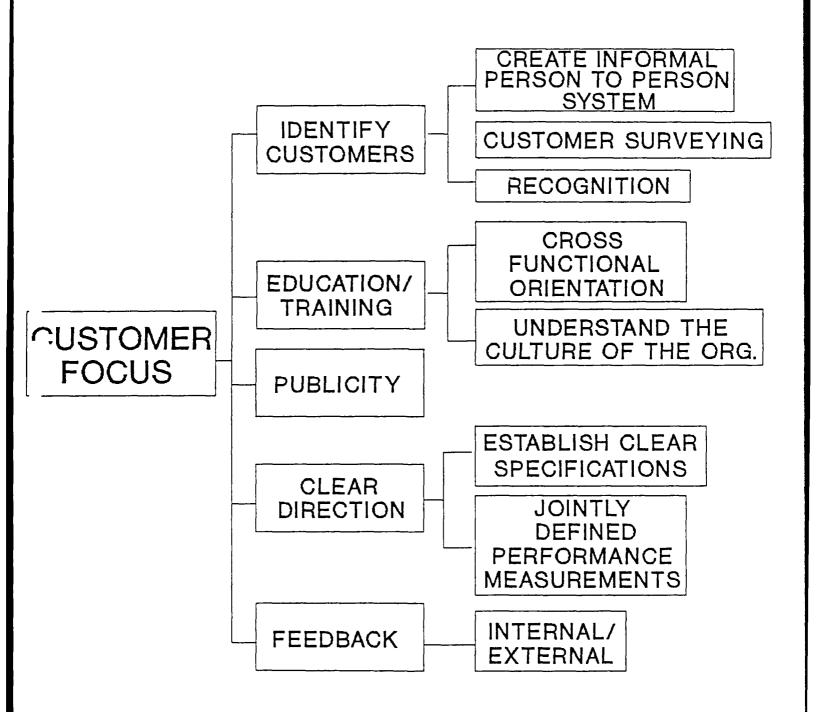
To realize our vision, we must first identify and rank our processes and then define those <u>key</u> processes analytically.
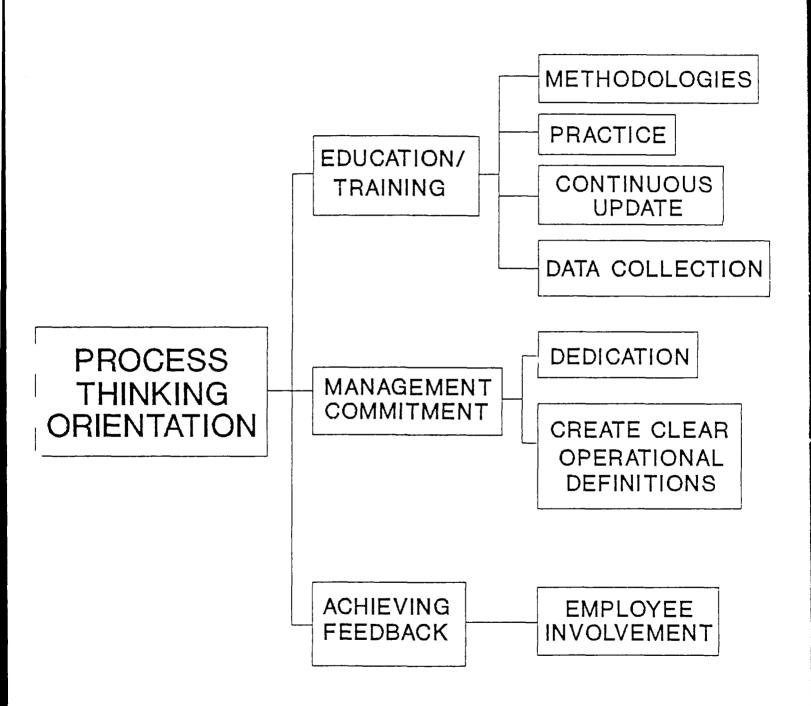
To achieve our plan, management at all levels must actively demonstrate its commitment. All managers, supervisors and employees must receive the education and training to understand the Total Quality Management (TQM) philosophy.
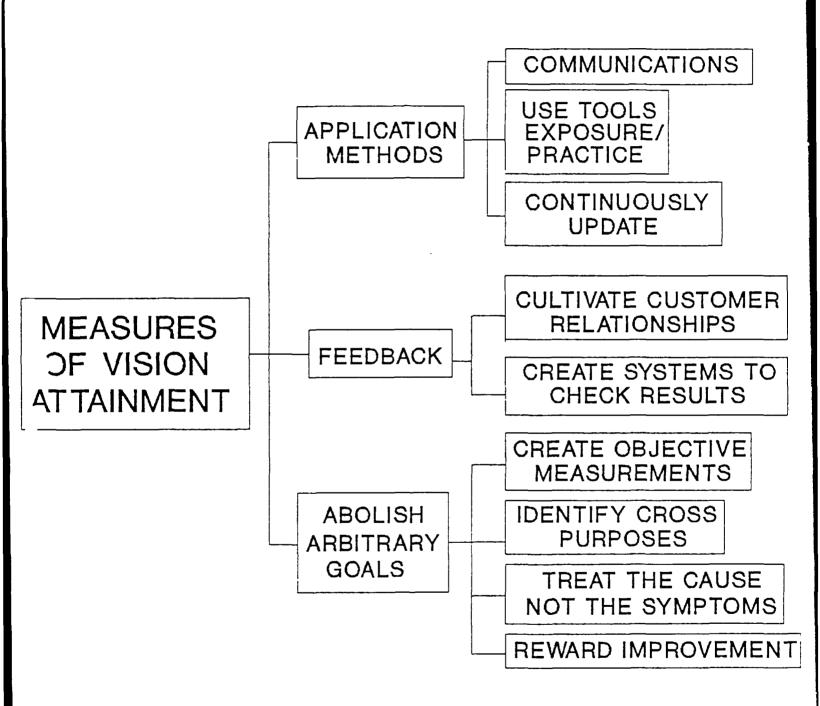
Identifying, ranking and defining the key processes and establishing targets will set the stage for the next phase of Management By Planning.

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                                      ┌──────────────────────┐
                                    ┌─│    PARTICIPATIVE     │
                                    │ │     MANAGEMENT       │
                                    │ └──────────────────────┘
                 ┌──────────────┐   │ ┌──────────────────────┐
              ┌──│    DEFINE    │───┼─│     MANAGEMENT       │
              │  └──────────────┘   │ │   SYSTEM CHANGES     │
              │                     │ └──────────────────────┘
              │                     │ ┌──────────────────────┐
              │                     └─│   REORGANIZATION     │
              │                       └──────────────────────┘
              │
              │                       ┌──────────────────────┐
              │                     ┌─│      EDUCATE         │
              │                     │ └──────────────────────┘
 ┌──────────────┐ ┌──────────────┐  │ ┌──────────────────────┐
 │  EMPLOYEE    │─│CHANGE CULTURE│──┼─│   TEAM PROJECTS      │
 │ INVOLVEMENT  │ └──────────────┘  │ └──────────────────────┘
 └──────────────┘                   │ ┌──────────────────────┐
              │                     └─│     LISTENING        │
              │                       └──────────────────────┘
              │
              │  ┌──────────────┐    ┌──────────────────────┐
              └──│ ACCEPT AND   │────│  JOINTLY DEFINED     │
                 │ ACKNOWLEDGE  │    │   PERFORMANCE        │
                 │RESPONSIBILITIES│  │  MEASUREMENTS        │
                 └──────────────┘    └──────────────────────┘
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                                        ┌─────────────────────┐
                                        │  CREATE INFORMAL    │
                                   ┌────│  PERSON TO PERSON   │
                                   │    │      SYSTEM         │
                  ┌─────────────┐  │    └─────────────────────┘
                  │  IDENTIFY   │──┤    ┌─────────────────────┐
                  │  CUSTOMERS  │  ├────│ CUSTOMER SURVEYING  │
                  └─────────────┘  │    └─────────────────────┘
                                   │    ┌─────────────────────┐
                                   └────│    RECOGNITION      │
                                        └─────────────────────┘

                                        ┌─────────────────────┐
                                        │      CROSS          │
                  ┌─────────────┐  ┌────│   FUNCTIONAL        │
                  │ EDUCATION/  │  │    │   ORIENTATION       │
                  │  TRAINING   │──┤    └─────────────────────┘
                  └─────────────┘  │    ┌─────────────────────┐
  ┌──────────┐                     └────│ UNDERSTAND THE      │
  │ CUSTOMER │                          │ CULTURE OF THE ORG. │
  │  FOCUS   │    ┌─────────────┐       └─────────────────────┘
  └──────────┘    │  PUBLICITY  │
                  └─────────────┘

                                        ┌─────────────────────┐
                                        │ ESTABLISH CLEAR     │
                  ┌─────────────┐  ┌────│ SPECIFICATIONS      │
                  │   CLEAR     │  │    └─────────────────────┘
                  │ DIRECTION   │──┤    ┌─────────────────────┐
                  └─────────────┘  │    │     JOINTLY         │
                                   └────│    DEFINED          │
                                        │  PERFORMANCE        │
                                        │ MEASUREMENTS        │
                                        └─────────────────────┘

                  ┌─────────────┐       ┌─────────────────────┐
                  │  FEEDBACK   │───────│    INTERNAL/        │
                  └─────────────┘       │    EXTERNAL         │
                                        └─────────────────────┘
```

MEASURES OF VISION ATTAINMENT

- APPLICATION METHODS
  - COMMUNICATIONS
  - USE TOOLS EXPOSURE/ PRACTICE
  - CONTINUOUSLY UPDATE
- FEEDBACK
  - CULTIVATE CUSTOMER RELATIONSHIPS
  - CREATE SYSTEMS TO CHECK RESULTS
- ABOLISH ARBITRARY GOALS
  - CREATE OBJECTIVE MEASUREMENTS
  - IDENTIFY CROSS PURPOSES
  - TREAT THE CAUSE NOT THE SYMPTOMS
  - REWARD IMPROVEMENT

DCASR BOSTON'S MILESTONES FOR STRATEGIC/TQM EXECUTION PLAN	CY 1989 1 2 3 4	CY 1990 1 2 3 4	CY 1991 1 2 3 4	CY 1992 1 2 3 4	CY 1993 1 2 3 4
1. ESTABLISH STEERING COMMITTEE	+				
a. ESTABLISH WORKING GROUP	+				
b. ESTABLISH TQM ORGANIZATION	+				
2. PUBLISH STRATEGIC/TQM MASTER PLAN	* <				
3. TRAINING					
a. DEVELOP TRAINING REQUIREMENTS	* ---	-------	-------	-------	-------
b. IDENTIFY COURSE AVAILABILITY	* ---	-------	-------	-------	-------
c. CONDUCT TRAINING	* ---	-------	-------	-------	-------
4. ONE-YEAR PLAN IMPLEMENTATION					
a. IDENTIFY PROCESSES	* -	-------	-------	-------	-------
b. PRIORITIZE PROCESSES	* -	-------	-------	-------	-------
c. DEFINE KEY PROCESSES	* -	-------	-------	-------	-------
5. SELECT INITIAL TQM PROJECTS					
a. MANAGEMENT BY PLANNING	* -	-------	-------	-------	-------
b. DEFECT REDUCTION CONTROL PROG.	* -	-------	-------	-------	-------
c. INVOICE COUNTING	> -	-------	-------	-------	-------
d. CONTRACT DATA BASE	* -	-------	-------	-------	-------
e. MONTHLY MANAGEMENT INDICATORS	> -	-------	-------	-------	-------
f. MANAGEMENT BY CONTRACTOR	> -	-------	-------	-------	-------

LEGEND:
> SCHEDULED START   < SCHEDULED COMPLETION   * STARTED   + COMPLETED   --- ONGOING

TRAINING
PLAN

SUBJECT / FUNCTION	TQM FOR DOD (PHILOSOPHY & EDUCATION)	TOOLS (HOW)
MANAGEMENT	REGION WIDE EDUCATION DEMING SEMINAR IMPROVING QUALITY & PRODUCTIVITY QUALITY & PRODUCTIVITY IMPROVEMENT TEAM PROCESS/SPC/METHODS ADMINISTRATIVE & SERVICE INSTITUTE INSTITUTE FOR PRODUCTIVITY THROUGH QUALITY SENIOR EXECUTIVE INSTITUTE	MBP OVERVIEW QFD OVERVIEW SELF INSP. OVERVIEW
DIVISION/ BRANCH/ SECTION	REGION WIDE EDUCATION IMPROVING QUALITY & PRODUCTIVITY QUALITY & PRODUCTIVITY IMPROVEMENT TEAM PROCESS/SPC METHODS	QC TOOLS MGMT. TOOLS MBP, QFD ADV. QFD SPC
WORK FORCE	REGION WIDE EDUCATION	*QC TOOLS *MGMT. TOOLS *MBP, QFD *ADV. QFD *SPC

*APPLICABLE TO PROJECT

DATE	COURSE TITLE	INSTRUCTOR	SLOTS	PARTICIPANTS
7/10	QFD EXECUTIVE OVERVIEW	STAN MARSH	10	TQM STEERING COMMITTEE
7/11 - 7/13	QFD PRACTITIONER/FACILITATOR	MICHAEL BRASSARD	22	MBP WORKING GROUP DCASR BOS-DQ
8/22 - 8/25	DEVELOPING A COMPANY WIDE CONTINUOUS IMPROVEMENT MASTER PLAN	GOAL/QPC STAFF	30	DCASR BOS-LR (2) DCASR BOS-DQ (5) REGION FACILITATORS
8/29 - 8/31	QFD PRACTITIONER/FACILITATOR	MICHAEL BRASSARD	30	REGION FACILITATORS
9/7 - 9/8 9/21 - 9/22	IMPROVING QUALITY & PRODUCTIVITY DURING SERVICES	PAUL KRENSKY	30	DCASR BOS-LR (2) DCASR BOS-DQ (5) TQM STEERING COMMITTEE
9/11	MBP EXECUTIVE OVERVIEW	BOB KING	30	TQM STEERING COMMITTEE REGION COMMANDERS DIRECTORS
9/12 - 9/14	MBP	MICHAEL BRASSARD	30	DCASR BOS-DQ (4) REGION FACILITATORS
9/26 - 9/27	SEVEN TOOLS FOR MANAGEMENT AND PLANNING	MICHAEL BRASSARD	30	DCASR BOS-LR (2) DCASR BOS-DQ (5) REGION FACILITATORS

ANNEXES

Affinity Diagram: (Also known as KJ Diagram) One of seven management tools which assists general planning.   It makes sense out of disparate language information by placing it on cards and grouping the cards that go together in some creative way.   "Header" cards are used to summarize each group of cards.

Annual Diagnosis: Review focusing on process, successes and failures in planning, execution, and monthly diagnosis to get better processes and results for the following year.

Arrow Diagram: One of the seven management tools which like the PERT (Program Evaluation Review Technique) and CPM chart (Critical Path Method), assists detailed planning by plotting the sequence of steps for doing parts of a job, indicating the jobs that can be done simultaneously, and the "critical" or longest path from beginning to end.

Catch Ball: A term that refers to the fact that communication up, down, and horizontally across the organization must sometimes go from person to person several times to be clearly understood.

Continuous Improvement: A system in which individuals in an organization look for ways to do things better, usually based on understanding and control of variation.

Control Item: Something measured to determine to what extent a target or means (measure) is met.

Daily Control: The system by which each worker identifies simply and clearly what they must do to fulfill their job function in a way that will enable the organization to run smoothly.   Also the system by which these required actions are monitored by the employee himself.

Fishbone Chart: A cause and effect diagram for analyzing problems and the factors that contribute to those problems.

Flag System: A method of displaying the interrelationships of different organizational run charts in such a way that planned and actual results are clear as well as relationships between various units.   The combination of lines and run charts has the appearance of flags, hence the name.

Histogram: A chart which takes measurement data (e.g., temperature, dimensions) and displays its distribution.   A histogram reveals the amount of variation that any process has within it.

Interrelationship Digraph: One of the seven management tools which assist general planning by showing with arrows the cause and effect relationship between items. Important items are recognized by the high number of arrows going in and coming out. Items with arrows only going out are usually good places to initiate action.

Management by Planning (MBP): MBP is the strategic planning system that uses all improvement efforts. It was started in 1965 and has been fine tuned over the last twenty years.

Matrix Data Analysis: One of the seven management tools which assists intermediate planning by plotting items on x- and y- axes to show relationships between individual items and groups of items.

Matrix Diagram: One of the seven management tools which assists intermediate planning by comparing one set of items against another set and identifies the strength of their relationship.

Means: (or Measure) A way to accomplish a target.

Monthly Diagnosis: The self evaluation of performance against targets, an examination of things that helped or hindered in meeting the targets, and the corrective actions that will be taken.

Objective: The means to meet a one-year plan at the top of the organization or to support the base strategy at a lower level of organization.

One-Year Plan: A statement of objectives of an organizational event for a year.

Pareto Analysis: A vertical bar graph showing the bars in order of size from left to right. Named after the 19th century economist Wilfredo Pareto (who discerned that wealth was not evenly distributed). Helps focus work on the vital few problems rather that the trivial many.

PERT Chart: (Program Evaluation and Review Technique) This chart aids the reduction of over-all project time by showing what can be done simultaneously and enabling a reduction of delays between things which are done sequentially.

PDCA Cycle: (Plan-Do-Check-Act) The plan-do-check-act system, sometimes referred to as the Deming or Shewhart cycle, is the scientific methodology in which improvements are planned, tried, and checked to see if they deserve to be implemented or abandoned.

Plan: The means to achieve a target.

Policy: The objectives that are to be achieved through the cooperation of all levels of managers and employees. A policy consists of targets, plans, and target values.

Policy Deployment: One English translation for hoshin kanri. (Others are management by policy and hoshin planning.) Policy deployment orchestrates continuous improvement in a way that fosters individual initiative and alignment.

Process Decision Program Chart: (PDPC) A tool for detailed planning that identifies the various things that can go wrong in a plan and identifies the countermeasures or contingencies.

Project Teams: Ad hoc groups whereby the problem defines the team.

Run Chart: This chart visually represents data. It is used to monitor a system to see whether or not the long range average is changing.

Quality Function Deployment: (Also QFD or Quality Factor Development) A system that identifies the needs of the customer and gets it to all the right people so that the organization can effectively exceed competition in meeting the customers' most important needs, thereby increasing market share.

Quality Management: Those systems, organizations, and tools which make it possible to plan, fabricate and serve a quality product or service.

SDCA Cycle: (Set standard, Do it, Check it, Activate or Adjust it) This is the system by which standard procedures are implemented or changed.

Seven New Tools for Management and Planning: (Also called the Seven Management Tools or Seven New Tools) It includes Affinity Diagram (kJ), Interrelationship Digraph, Tree Diagram, Matrix chart, Matrix data analysis, PDPC (Process Decision Program Chart) and Arrow Diagram. They are used heavily in Management by Policy, Quality Function Deployment and Total Productive Maintenance.)

Standardization: The system of documenting and updating procedures to make sure everyone knows clearly and simply what is expected of them (measured by daily control).

Statistical Quality Control: (SQC) The use of knowledge and control of variation in improving and maintaining the organizational processes.

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<u>Storyboarding</u>:   A system developed and popularized by Walt Disney in which characters and plots and locations (etc.) were put on cards and reorganized to create new story lines. It is now used to describe any use of cards to arrange information.

<u>Strategy</u>: A means to meet an objective.

<u>Systems Flow/Tree Diagram</u>: One of the seven management tools that helps intermediate planning by systematically breaking down plans into component parts.

<u>Target</u>:   The desired goal that serves as a yardstick to evaluate the degree to which a "policy" is achieved.   It is also referred to as a "control point," "control·item," or "target item."

<u>Target Value</u>:   Normally a numerical definition of successful target attainment.   This is not always possible.   You must never separate the target from the plan.

<u>Total Quality Management</u>:   (TQM) is the application of quantitative methods and human resources to improve the material and services supplied to an organization, all the processes within an organization and the degree to which the needs of the customer are met, now and in the future.

<u>Vision</u>: A five-year plan of direction.

PRINCIPLES

1. EVERYONE MANAGES A PROCESS.

2. THE ORGANIZATION IS A NETWORK OF INTERDEPENDENT PROCESSING SYSTEMS LINKED IN SUPPLIER/CUSTOMER RELATIONSHIPS.

3. SYSTEMS CAN BE DEFINED FROM MACRO TO MICRO LEVELS FOR ANALYSIS.

4. BOUNDARIES ARE DEFINED BY PROCESS FLOW.

5. RESPONSIBILITIES MAY CROSS FUNCTIONAL BOUNDARIES. THEREFORE, PROCESSING SYSTEM OWNERSHIP MUST BE MADE EXPLICIT.

6. PROCESS CONTROL REQUIRES MEASUREMENT AND FEEDBACK TO THE PROCESS MANAGER.

7. TARGETS, OBJECTIVES, AND MEASURES SHOULD HELP THE PROCESS MANAGER (SUPPLIER) MEET CUSTOMER REQUIREMENTS.

8. PROCESS IMPROVEMENT REQUIRES COMMUNICATION BETWEEN CUSTOMER AND SUPPLIER.

9. IMPROVEMENT IS PROCESS, NOT OUTCOME ORIENTED; OUTCOMES ARE MEASURED OVER TIME TO UNDERSTAND PERFORMANCE PATTERNS IN ORDER TO IMPROVE THE PROCESS.

10. VALUE IS ADDED WHEN THE CUSTOMER IS HELPED.